STREAMS III Technical Directive Request
Groundwater Technical Support Center (GWTSC)
Center for Subsurface Modeling Support (CSMoS)
CESER/GCRD – Ada, OK

Contractor: Eastern Research Group (ERG)
Contract #: ERG EP-C-16-015   **Task Order #:** 006
Period of Performance: 04/17/2019 thru 04/16/2020

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Technical Directive #: ERG-GWTSC-023   **Amendment #: 02**
Request Date: 04/15/2020
Est. Completion Date: 04/16/2021

Site/Project Name: Geospatial Tools and Data Visualization Tools for PFAS
Location: National
EPA Region: ORD/OECA

The following amendment is incremental work which builds on the original work assignment in Attachment 1.

Amendment:

- Overall responsibility for development, support and maintenance of the National PFAS Data Explorer (NDPE) transitioned from Office of Enforcement and Compliance Assurance (OECA) to Office of Research and Development (ORD). This amendment is intended to restate and, in some cases, clarify contract development and support expectations/responsibilities accordingly.
- Develop a public facing dashboard for NDPE.
  - Support the design of the NDPE and public access webpage, for presentation to EPA senior executives, managers, researchers and external clients (e.g. EPA workgroups, States, ECOS).
  - Establish a change control process for the NDPE.
  - Collect, document and incorporate feedback provided by the NDPE user community through an established and documented change control process.
  - Establish a versioning scheme for the original and subsequent NDPE releases.
  - Maintain NDPE current consistent with established change control procedures. The process shall also comply with established standard operating procedures (SOPs) and establish a predictable release schedule (e.g. Quarterly/Semi-Annual/Annual) for NDPE updates. The release schedule may vary in frequency depending on the data source layer (e.g. WQP, UCMR, CDR, DMR, NPDES, NPL, ATSDR, DOD, etc...).
    - ***Example Only***:

Data File	Retrieval/Import Method	Comment
WQP	Web Services (API)	
DMR (NPDES)	Web Services (API)	Changes monthly
Points of Interest ECHO	Web Services (API)	
CDR	Flat Files/Manual	Every 4 years (change in PFAS list, CBI shielding)
UCMR3, 4 & 5	Flat Files/Manual	Every 5 years (Combine files)
PFAS Places of Interest	Flat Files/Manual	***Need a database built & API***
DOD	Flat Files/Manual	Annual
ATSDR	Flat Files/Manual	Quarterly
NPL	Flat Files/Manual	Annual

  - Prior to all NDPE releases deliver a mock-up to the COR and Clients for review and approval. Releases should be documented on the EPA's PFAS web page in order to make the public aware of changes/updates.
  - Verify and maintain the NDPE operational and accessible to the user community.
  - Support outreach to state organizations and EPA offices/regions: Support testing, incorporate feedback as directed, and fix any errors or bugs that arise.
- Develop Data Standards and Transfer Processes for Sharing with Partners
  - Document and maintain processes pertaining to data collection, data curation, merger of datasets, and use of PFAS Data for use/display in the NDPE and create SOPs to ensure consistency and repeatability.
  - Document and maintain the NDPE Data Submission Guide that ties together the data flow structure (visual), with narrative about data completeness in the current data sets, data submission instructions for external users, and guidelines for using the data.

- o Maintain the NDPE data layers to include data shared by other federal/state/tribal/local government agencies and partner organization(s). This is to support using existing EPA databases and enterprise systems for sharing, hosting, and transferring the information between EPA and partners.
  - o Ongoing – Support state pilots for sharing and transferring data.
  - o As needed – Where existing EPA databases are not an option, the contractor shall create a location to store this data and set up a data transfer process.
- Develop and maintain multiple NDPE versions (e.g. internal and public)
  - o Develop and maintain both the public and internal versions of the NDPE
  - o Continue to improve existing internal EPA PFAS Tools to included new template/format that includes SIC/NAICS tools, in addition to other tools that will enhance both the internal and public-facing versions of NDPE.
  - o Complete the automation of data updates from EPA databases and build this into the suite of PFAS Analytic Tools (ICIS-NPDES DMR, Water Quality Portal, and ECHO Facilities).
- Coordinate data collection, curation, and sharing with GeoPlatform developers for standardization/representation of the data across NDPE and GeoPFAS tool.
- Complete development of an ECHO Gov search capability and include it in the NDPE to search for select industries by SIC and NAICS for PFAS specific industries.
- Attend meetings as specified by the COR. Assume 3 trips to RTP or Washington DC.

Attachment 1 - Original Statement of Work

Description of Subtask to be performed:

Maintain and Develop National PFAS Data Explorer (NDPE)
Subtask 3: Scientific Modeling and GIS Support

The contractor shall develop the NDPE and be responsible for collecting, curating, assembling, and uploading data sets for the purpose of providing data visualizations relating to PFAS contamination. The contractor shall develop and maintain Qlik applications and mashups hosted by EPA internal use and public use, like on the ECHO page for PFAS Data Navigation Center for EPA and States. The contractor shall participate in workgroup calls with other EPA and state offices to collect requirements for future products; developing data sets and map layers that can be used for analysis; quality assurance and testing; data quality analysis; data normalization across data sets; documentation of processes used to utilize data sets; data analysis/targeting; and development of automation strategies to refresh data or collect data that are used in the project. The contractor shall assist in the design, development, testing, creation of automated test cases, and documentation of new features. Where applicable the tools will include select options, data visualizations, summary information, mapping, and data download features. Features must use the latest EPA template, as applicable, follow EPA web and security standards, meet ECHO user needs, and be section 508 compliant.

Documentation shall include the process of querying/displaying data for internal use, as well as help text, select logic, source information, and pull/refresh dates in user-friendly, plain language formats for posting on the site. In addition, known data limitations shall be documented. The contractor also may support this task by assisting with user outreach and training for the new features.

ECHO PFAS Data Navigation Center for EPA and States
(Subtask 3: Scientific Modeling and GIS Support)

The contractor shall maintain the page on the ECHO website which hosts the PFAS Data Navigation Center for EPA and States. The contractor shall manage the security options: public, EPA only, and restricted to ECHO Gov users (EPA and states) as directed by the COR.

The website will host the PFAS Analytics Tools as well as related information/data from state and local governments, non-governmental/private organizations, EPA, and other federal agencies. The contractor shall develop and maintain a GIS product showing place-based web resources that are available related to PFAS. Features must use the latest EPA template, as applicable, follow EPA web and security standards, meet ECHO user needs, and be section 508 compliant.

Develop Data Standards and Transfer Processors for Sharing with Partners
(Subtask 2: Technical Information Transfer)

The contractor shall provide technical support for PFAS information transfer activities (i.e. technical bulletins and brochures, guidance documents, issue papers) by collecting and summarizing information for active and completed projects.

The contractor shall assess the feasibility of existing EPA databases and enterprise systems for sharing, hosting, and transferring the information between EPA and partners. Where existing EPA databases are not an option, the contractor shall create a location to store this data and set up a data sharing/transfer process. The contractor shall also create help and documentation to assist users.

The contractor shall organize, synthesize, and summarize data for EPA use, including integration with the PFAS Analytic Tools. The contractor shall facilitate the transfer of information by providing specialized scientific and information support, such as preparation of draft instructional materials for meetings, demonstrations, seminars, and professional development workshops. The contractor shall prepare draft technical documents, manuscripts, reports, articles, briefing documents, research summaries, issue papers and summaries of gathered information as requested.

Technology Transfer and Data Sharing
(Subtask 2: Technical Information Transfer)

EPA plans to better integrate the PFAS Analytic Tools with other products, for example, Enviro Atlas. The contractor shall develop strategies to ensure that the existing PFAS screening tool can be exported for use in other platforms. The contractor shall develop data sharing approaches that can support data loading in more site-specific assessment tools.

Document(s) or Information Provided by TO-COR:

The National PFAS Data Explorer which are a comprehensive assembly of PFAS-related observations in a geospatial and drill down format that includes environment observations (e.g., Unregulated Contaminant Monitoring Rule data, fish tissue), specific industrial facilities reporting detection, discharges, manufacturing, or importation, and a wide array of search capabilities to discover potential sites (i.e. landfills, fire training, airports, etc.) in the area. OECA and ORD will work with ERG to build on what they have developed using ORD's geospatial experience and expertise with EnviroAtlas to create a tool with enhanced dissemination and research capability.

Deliverables and Due Dates:

- Maintain and Develop National PFAS Data Explorer
  - Ongoing updates to Tools as directed by the COR.
- ECHO PFAS Data Navigation Center for EPA and States
  - Ongoing updates to webpage as directed by the COR.
- Develop Data Standards and Transfer Processors for Sharing with Partners
  - Summary of information for active and completed projects by partners/states.
  - Assessment of feasibility of existing EPA databases and enterprise systems for sharing, hosting, and transferring the information between EPA and partners.

- - Where existing EPA databases are not an option, the contractor shall create a location to store this data and set up a data transfer process.
- Technology Transfer and Data Sharing
  - - The contractor shall ensure the NDPE data can be downloaded/exported for use in other platforms (i.e. EnviroAtlas, GeoPlatform).
  - - The contractor shall develop automated data uploading/sharing approaches that can support data sharing across multiple platforms.

Expertise Requested: Qlik, HTML, CSS, Java, ArcGIS,

Estimated Hours to Perform:
~750

Special Instructions (if required):
For evaluation of potential conflict of interest, the PRPs at this site are: N/A
The materials being reviewed were prepared by: N/A

Attachments: N/A

Documents Sent: N/A

Additional Information: N/A